

## **REMARKS**

### **Summary**

Claims 1, 2, 5-23 and 25-34 stand in this application. Claims 1, 21, 26, 30 and 32 have been amended. Claims 35 and 36 have been withdrawn. No new matter has been added. Favorable reconsideration and allowance of the standing claims are respectfully requested.

Although Applicant disagrees with the broad grounds of rejection set forth in the Office Action, Applicant has amended independent claims 1, 21, 26, 30 and 32 in order to facilitate prosecution on the merits.

### **35 U.S.C. § 102**

At page 2, paragraph 3 of the Office Action claims 1-15, 17-26, 28-32 and 34 stand rejected under 35 U.S.C. § 102 as being anticipated by United States Patent Number (USPN) 7,016,296 to Hartman ("Hartman"). Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the anticipation rejection.

Applicant respectfully submits that to anticipate a claim under 35 U.S.C. § 102, the cited reference must teach every element of the claim. *See* MPEP § 2131, for example. Applicant submits that Hartman fails to teach each and every element recited in claims 1, 2, 5-15, 17-23, 25-26, 28-32 and 34 and thus they define over Hartman. For example, with respect to claim 1, Hartman fails to teach, among other things, the following language:

wherein said medium reservation request message includes training information comprising a training sequence.

According to the Office Action, this language is disclosed by Hartman at column 5, lines 29-61, column 10, lines 45-50 and figure 7. Applicant respectfully disagrees.

Hartman at the given cites, in relevant part, states:

Estimation of the upstream channel is achieved by dividing the channel into a total of  $N$  carriers or tones, including  $N_{\text{sub.data}}$  data tones,  $v$  training tones and  $N_{\text{sub.zero}}$  zero tones. The training tones enable the WATS 104 to estimate the characteristics of the upstream channel. ... Preferably, the zero tones are placed in the  $N_{\text{sub.zero}}/2$  left most and  $N_{\text{sub.zero}}/2$  right most tones that are not already designated as training tones. The remaining tones are dedicated to the transmission of data. Hartman at column 5, lines 47-61.

In one embodiment of the WATS 104, a VOFDM burst signal is received at the WATS-ODU 108 and is input to the upstream burst receiver 702. The upstream burst receiver 702 demodulates the VOFDM burst signal and at the same time, measures the SINR for each tone in the signal. Hartman at column 10, lines 45-50.

In contrast, the claimed subject matter teaches "wherein said medium reservation request message includes training information comprising a training sequence."

Applicant respectfully submits that dividing a channel into a total of  $N$  tones and using training tones to estimate the upstream channel, as arguably taught by Hartman, is different than the above recited language of claim 1. Furthermore, the use of a VOFDM burst signal is also different than a "medium reservation request message includes training information comprising a training sequence." Applicant respectfully submits that each of the above cited portions of Hartman fails to disclose the missing language of claim 1. Applicant respectfully submits that each of the above cited portions of Hartman fails to even mention training information comprising a training sequence included with a medium reservation request message.

Moreover, Applicant respectfully disagrees with the Office Actions allegation on page 4 that the modulated data disclosed in figure 7 is equivalent with a training sequence. Applicant respectfully submits that there is no indication in figure 7 that the “modulated data input from transmission medium” is included as part of a medium reservation request message. In contract, claim 1 recites “wherein said medium reservation request message includes training information comprising a training sequence.”

Consequently, Hartman fails to disclose all the elements or features of the claimed subject matter. Accordingly, Applicant respectfully requests removal of the anticipation rejection with respect to claim 1. Furthermore, Applicant respectfully requests withdrawal of the anticipation rejection with respect to claims 2, 5-15 and 17-20, which depend from claim 1 and, therefore, contain additional features that further distinguish these claims from Hartman.

Independent claims 21, 26, 30 and 32 have been amended to recite features similar to those recited in claim 1. Therefore, Applicant respectfully submits that claims 21, 26, 30 and 32 are not anticipated and are patentable over Hartman for reasons analogous to those presented with respect to claim 1. Accordingly, Applicant respectfully requests removal of the anticipation rejection with respect to claims 21, 26, 30 and 32. Furthermore, Applicant respectfully requests withdrawal of the anticipation rejection with respect to claims 22, 23, 25, 28, 29, 31 and 34 that depend from claims 21, 26, 30 and 32 respectively, and therefore contain additional features that further distinguish these claims from Hartman.

**35 U.S.C. § 103**

At page 12, paragraph 5 of the Office Action claims 16, 27 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hartman. Applicant respectfully traverses the rejection, and requests reconsideration and withdrawal of the obviousness rejection.

Applicant respectfully submits that if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. *See* MPEP § 2143.03, for example. Applicant submits that claim 16 depends from independent claim 1, claim 27 depends from independent claim 26 and claim 33 depends from independent claim 32. Furthermore, Applicant respectfully submits, as stated above, that Hartman fails to teach, suggest or disclose all of the elements of the independent claims. Accordingly, removal of the obviousness rejection with respect to claims 16, 27 and 33 is respectfully requested at least on the basis of their dependency from claim 1, 26 and 32. Applicant, therefore, respectfully requests the removal of the obviousness rejection with respect to these dependent claims.

For at least the reasons given above, claims 16, 27 and 33 are non-obvious and represent patentable subject matter in view of the cited reference. Accordingly, removal of the obviousness rejection with respect to claims 16, 27 and 33 is respectfully requested. Further, Applicant submits that the above-recited novel features provide new and unexpected results not recognized by the cited reference. Accordingly, Applicant submits that the claims are not anticipated nor rendered obvious in view of the cited reference.

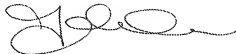
Applicant does not otherwise concede, however, the correctness of the Office Action's rejection with respect to any of the dependent claims discussed above. Accordingly, Applicant hereby reserves the right to make additional arguments as may be necessary to further distinguish the dependent claims from the cited reference, based on additional features contained in the dependent claims that were not discussed above. A detailed discussion of these differences is believed to be unnecessary at this time in view of the basic differences in the independent claims pointed out above.

It is believed that claims 1, 2, 5-23 and 25-34 are in allowable form. Accordingly, a timely Notice of Allowance to this effect is earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present patent application.

Respectfully submitted,

KACVINSKY LLC



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John F. Kacvinsky, Reg. No. 40,040  
Under 37 CFR 1.34(a)

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4500 Brooktree Road, Suite 102  
Wexford, PA 15090  
(724) 933-5529